

WHAT IS CLAIMED IS:

1. An image processing apparatus, comprising:

a) input means for inputting successive image data;

5 b) detection means for detecting a change in the image data;

c) generation means for generating initial contour information for extracting an object present in the image data in accordance with an output from said
10 detection means; and

d) extraction means for extracting object image data corresponding to the object on the basis of the initial contour information generated by said
15 generation means.

2. An apparatus according to claim 1, further comprising coding means for coding the object image data extracted by said extraction means.

20 3. An apparatus according to claim 2, further comprising transmission means for transmitting the image data coded by said coding means.

25 4. An apparatus according to claim 1, wherein the image data input by said input means include data picked up by a video camera, said input means inputs parameter data concerning a camera parameter of the

video camera, and said detection means detects a change in image based on the parameter data.

5 5. An apparatus according to claim 4, wherein said detection means performs different detection processing in accordance with the parameter data.

10 6. An apparatus according to claim 4, wherein said input means includes the video camera.

15 7. An apparatus according to claim 1, wherein said generation means includes first area-division means for performing area division based on a color and texture, and second area-division means for performing area division based on motion of image data, and generates the initial contour information in accordance with outputs from said first and second area-division means.

20 8. An apparatus according to claim 7, further comprising display means for displaying image data input by said input means, wherein said display means can display an extraction result of said extraction means so as to visually check the extraction result.

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9. An apparatus according to claim 2, wherein said coding means performs coding processing complying

with MPEG-4 (ISO/IEC 14496).

10. An apparatus according to claim 2, further comprising recording means for recording image data
5 coded by coding means on a recording medium.

11. An image processing method comprising the steps of:

- a) inputting successive image data;
- 10 b) detecting a change in the image data;
- c) generating initial contour information for extracting an object present in the image data in accordance with a detection result of the detection step; and
- 15 d) extracting object image data corresponding to the object on the basis of the generated initial contour information.

12. A storage medium which stores program codes of
20 the image processing steps, wherein the storage medium stores:

- a) a code of the input step of inputting successive image data;
- b) a code of the detection step of detecting a
25 change in the image data;
- c) a code of the generation step of generating initial contour information for extracting an object

present in the image data in accordance with a
detection result of the detection step; and

d) a code of the extraction step of extracting
object image data corresponding to the object on the
5 basis of the initial contour information generated in
the generation step.